Maryland Historical Trust

Maryland Inventory of Historic Properties number: WA-I-732

Name: W-2381/ OLD FORGE RD. OVER MARSH RUN

The bridge referenced herein was inventoried by the Maryland State Highway Administration as part of the Historic Bridge Inventory, and SHA provided the Trust with eligibility determinations in February 2001. The Trust accepted the Historic Bridge Inventory on April 3, 2001. The bridge received the following determination of eligibility.

MARYLAND HISTORICAL TRUST

Eligibility Recommended _____ Eligibility Not Recommended __X____

Criteria: ____A ____B ____C ____D Considerations: ___A ___B ___C ___D ___E ___F ___G __None

Comments:_____

_____

_____

Reviewer, OPS:_Anne E. Bruder_____ Date:__3 April 2001____

Reviewer, NR Program:__Peter E. Kurtze_____ Date:__3 April 2001____

MARYLAND INVENTORY OF HISTORIC BRIDGES
HISTORIC BRIDGE INVENTORY
MARYLAND STATE HIGHWAY ADMINISTRATION/
MARYLAND HISTORICAL TRUST

MHT No. WA-I-732

SHA Bridge No. W-2381 Bridge name Old Forge Road over Marsh Run

LOCATION:
Street/Road name and number [facility carried] Old Forge Road

City/town East-northeast of Hagerstown Vicinity _____

County Washington

This bridge projects over: Road____ Railway_____ Water X_____ Land ____

Ownership: State _____ County __X____ Municipal _____ Other _____

HISTORIC STATUS:
Is the bridge located within a designated historic district? Yes _____ No __X____
National Register-listed district ____ National Register-determined-eligible district __
Locally-designated district _____ Other _____

Name of district _____

BRIDGE TYPE:
Timber Bridge _____:
Beam Bridge _____ Truss -Covered ___ Trestle ____ Timber-And-Concrete ___

Stone Arch Bridge _____

Metal Truss Bridge _____

Movable Bridge ____:
Swing _____ Bascule Single Leaf __ Bascule Multiple Leaf _____
Vertical Lift _____ Retractile_____ Pontoon _____

Metal Girder_____:
Rolled Girder _____ Rolled Girder Concrete Encased _____
Plate Girder _____ Plate Girder Concrete Encased _____

Metal Suspension _____

Metal Arch _____

Metal Cantilever _____

Concrete __X_____:
Concrete Arch_____ Concrete Slab __X__ Concrete Beam ___ Rigid Frame _____
Other _____ Type Name _____

DESCRIPTION:

Setting: Urban _____ **Small town** ___X___ **Rural** _____

Describe Setting: Bridge No. W-2381 carries Old Forge Road over Marsh Run in Washington County. Old Forge Road runs east-west at the crossing, and Marsh Run flows north-south under the bridge. The bridge is located east-northeast of Hagerstown in the small town of Fiddlesburg.

Describe Superstructure and Substructure:

This bridge matches Maryland SHA Design Standards from 1919, and available records indicate it was built in circa 1919. Bridge No. W-2381 is a two span, simply supported, two-lane concrete slab bridge. It is 34' in length, 24' wide, and has a span length of 17'. It has no skew. The superstructure consists of a concrete slab with solid unornamented concrete parapets. The substructure consists of concrete abutments, wingwalls, and a solid shaft concrete pier. The southern wingwalls are U-shaped, and the northern wingwalls are flared. The structure is posted for a weight limit of 10 tons.

According to the most recent inspection report for the bridge, its condition is as follows. Some of the previous concrete repairs are beginning to exhibit extensive cracking and some spalling with efflorescence leakage. The concrete sounds hollow in some of these areas. At the outlet end of the east span, cracking and spalling has started on the underside and corner of the slab. The underside of the slab has numerous cracks with efflorescence coming through and small stalagmites forming. Both parapets have a vertical crack near the pier that extends through the parapet for its full height. The parapet walls are in generally good condition. The concrete in the abutments and piers is eroded and spalled at the water line. There is minor scour at the nose of the pier, but there is no undermining of either the pier or the abutments.

Discuss Major Alterations:

The 1979 inspection report indicates the bridge should be scheduled for major work and recommended repair of the deck and replacement of the parapets. The 1981 report indicates "rehabilitation work completed recently", these consisted of resurfacing the deck and the grouting of cracks in the parapet. Sections of the cap were removed and a cold-joint repair made.

Washington County bridge files do not contain further information pertaining to repairs made the structure, the extent thereof, or when they took place.

HISTORY:

WHEN was the bridge built (actual date or date range) circa 1919

This date is: Actual _____ **Estimated** ___X___

Source of date: Plaque _____ **Design plans** ___X___ **County bridge files/inspection form** ___

Other (specify) _____

WHY was the bridge built?

Unknown

WHO was the designer?

State Roads Commission

WHO was the builder?

State Roads Commission

WHY was the bridge altered?
Repairs were necessary: concrete deck repairs and parapet repairs completed between 1979 and 1981.

Was this bridge built as part of an organized bridge-building campaign?
Yes. This bridge was constructed as a part of post World War I improvements to secondary roads in Maryland.

SURVEYOR/HISTORIAN ANALYSIS:

This bridge may have National Register significance for its association with:
A - Events _____ B- Person _____
C- Engineering/architectural character _____

This bridge does not have National Register significance.

Was the bridge constructed in response to significant events in Maryland or local history?
Reinforced concrete slab bridges are a twentieth century structure type, easily adapted to the need for expedient engineering solutions. Reinforced concrete technology developed rapidly in the early twentieth century with early recognition of the potential for standardized design. The first U.S. attempt to standardize concrete design specifications came in 1903-04 with the formation of the Joint Committee on Concrete and Reinforced Concrete of the American Society of Civil Engineers.

Maryland's road and bridge improvement programs mirrored economic cycles. The first road improvement program of the State Roads Commission was a 7 year program, starting with the Commission's establishment in 1908 and ending in 1915. Due to World War I, the period from 1916-1920 was one of relative inactivity; only roads of first priority were built. Truck traffic resulting from war-related factories and military installations generated new, heavy traffic unanticipated by the builders of the early road system. From 1920 to 1929, numerous highway improvements occurred in response to the increase in Maryland motor vehicles from 103,000 in 1920 to 320,000 in 1929, with emphasis on the secondary system of feeder roads which moved traffic from the primary roads built before World War I. After World War I, Maryland's bridge system also was appraised as too narrow and structurally inadequate for the increasing traffic, with plans for an expanded bridge program to be handled by the Bridge Division, set up in 1920. In 1920 under Chapter 508 of the Acts of 1920 the State issued a bond of $3,000,000.00 for road construction; the primary purpose of these monies was to meet the state obligations involving the construction of rural post roads. The secondary purpose of these monies was to fund [with an equal sum from the counties] the building of lateral roads. The number of hard surfaced roads on the state system grew from 2000 in 1920 to 3200 in 1930. By 1930, Maryland's primary system had become inadequate to the huge freight trucks and volume of passenger cars in use, with major improvements occurring in the late 1930s. Most improvements to local roads waited until the years after World War II.

With a diverse topographical domain encompassing numerous small and large crossings, Maryland engineers quickly recognized the need for expedient design and construction.

In the early years, there was a need to replace the numerous single lane timber bridges. Walter Wilson Crosby, Chief Engineer stated in 1906, "The general plan has been to replace these [wood bridges] with pipe culverts or concrete bridges and thus forever do way with the further expense

of the maintenance of expensive and dangerous wooden structures". Within a few years, readily constructed standardized bridges of concrete were being built throughout the state.

The creation of standard plans and a description of their use was first announced in the 1912-15 Reports of the State Roads Commission whereby bridges spanning up to 36 feet were to use standardized designs.

Published on a single sheet, the 1912 Standard Plans included those structures that were amenable to such an approach: slab spans, (deck) girder spans, box culverts, box bridges, abutments, and piers (State Roads Commission 1912). Slab spans, with lengths of 6 to 16 feet in two foot increments, featured a solid parapet that was integrated into the slab, with a roadway of 22 feet.

In the Report for the years 1916-1919, a revision of the standard plans was noted:

> During the four years covered by this report, it has been found necessary to revise our standard plans for culverts and bridges, to take care of the increased tonnage which they have been forced to carry. Army cantonments...increased their operations several hundred per cent, and the brunt of the enormous truck traffic resulting therefrom, was borne by the State Roads of Maryland. In addition to these war activities, freight motor lines from Baltimore to Washington, Philadelphia, New York, and various points throughout Maryland, and the weight of many of these trucks when loaded, was in excess of the loads for which our early bridges were designed (State Roads Commission 1920:56).

Published on separate sheets, the new standard plans (State Roads Commission 1919) for slab bridges reveal that the major changes was an increase in roadway width from 22 feet to 24 feet and a redesign of the reinforcement. The slab spans continued to feature solid parapets integrated into the span. The range of span lengths remained 6 to 16 feet, but the next year (1920) witnessed the issue of a supplemental plan for a 20 foot long slab span (State Roads Commission 1920).

When the bridge was built and/or given a major alteration, did it have a significant impact on the growth and development of the area?
Unknown.

Is the bridge located in an area which may be eligible for historic designation and would the bridge add to or detract from the historic/visual character of the potential district?
No. This bridge is not located in an area which may be eligible for historic designation.

Is the bridge a significant example of its type?
No. Bridge No. W-2381 is one of many concrete slab bridges built after the first World War in Maryland. Many of its character defining elements are in a deteriorated state, and it is an undistinguished example of its type.

Does the bridge retain integrity of important elements described in Context Addendum?
No. This bridge appears to have its character defining elements intact. However, inspection reports indicate the condition of Bridge No. W-2381 is deteriorating, and there is the possibility of chloride contamination.

Is the bridge a significant example of the work of a manufacturer, designer, and/or engineer?
This bridge is not a significant example of the work of the State Roads Commission.

Should the bridge be given further study before an evaluation of its significance is made?
No further evaluation is necessary to determine National Register significance. Although it reflects the state's post World War I expansion of secondary road systems, it is an undistinguished example of its type. However, additional research concerning the history of this bridge and its relationship to the surrounding landscape may be useful in providing a more complete picture of the bridge's background.

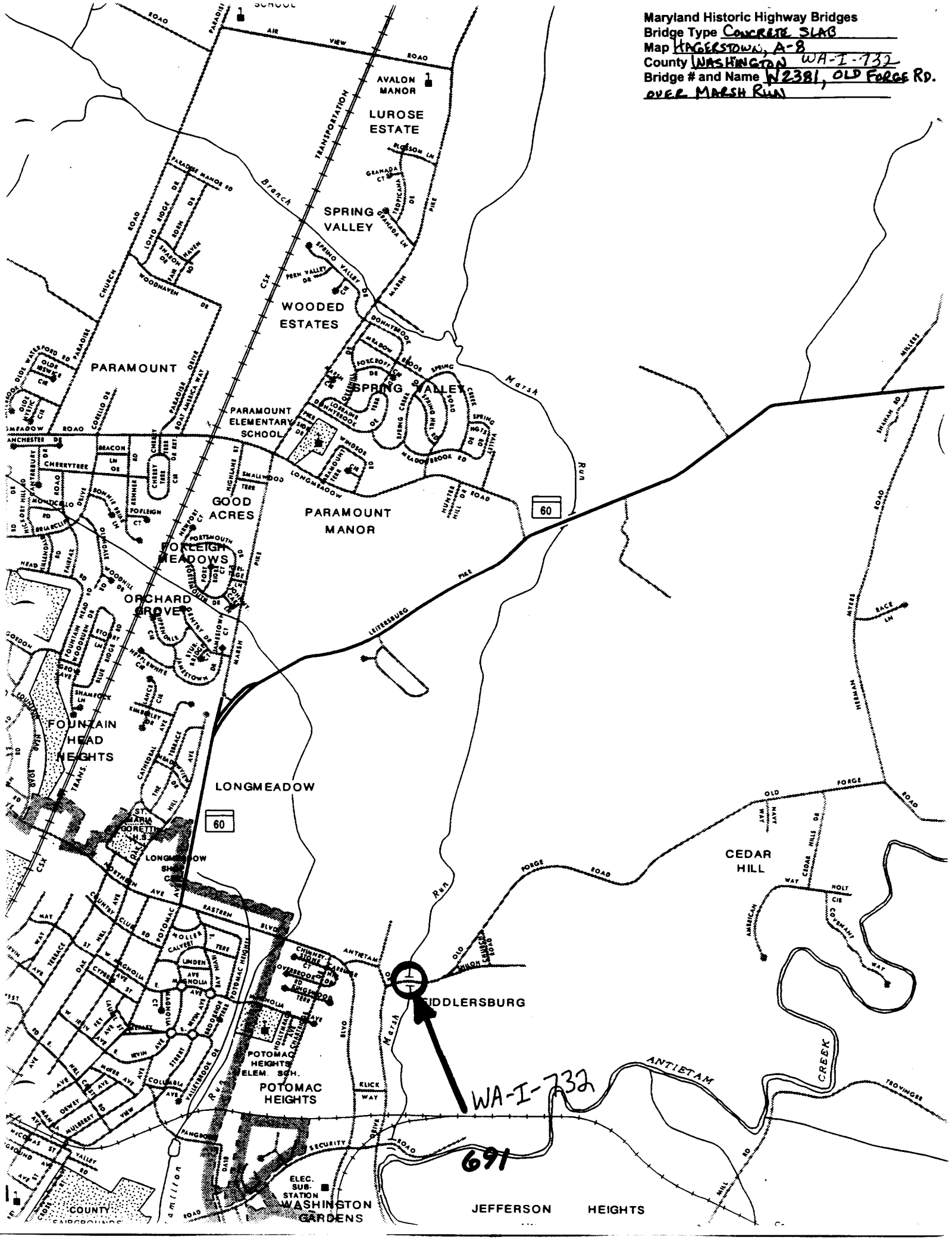
BIBLIOGRAPHY:

County inspection/bridge files X **SHA inspection/bridge files** _____
Other (list):

SURVEYOR:

Date bridge recorded August 1995
Name of surveyor Adrienne Beaudet Cowden
Organization/Address P.A.C. Spero & Company; 40 West Chesapeake Avenue, Suite 412; Baltimore, Maryland 21204
Phone number 410-296-1635 **FAX number** 410-296-1670

Maryland Historic Highway Bridges
Bridge Type CONCRETE SLAB
Map HAGERSTOWN, A-8
County WASHINGTON WA-I-732
Bridge # and Name W2381, OLD FORGE RD. OVER MARSH RUN



#9700711

INDIVIDUAL PROPERTY/DISTRICT
MARYLAND HISTORICAL TRUST
INTERNAL NR-ELIGIBILITY REVIEW FORM

Property/District Name: Bridge W-2381 Survey Number: WA-I-732

Project: Bridge Replacement Agency: FHWA

Site visit by MHT Staff: _X_ no ___ yes Name _____ Date _____

Eligibility recommended _____ Eligibility **not** recommended __X__

Criteria: ___A ___B ___C ___D Considerations: ___A ___B ___C ___D ___E ___F ___G ___None

Justification for decision: (Use continuation sheet if necessary and attach map)

Bridge W-2381, Old Forge Road Bridge over Marsh Run, in Washington County, MD is not considered eligible for listing on the National Register. The bridge was included in the Historic Bridge Inventory and was determined not eligible for listing on the National Register of Historic Places by the Interagency Bridge Committee due to lack of integrity.

The bridge was originally constructed ca. 1919 and was significantly altered between 1979 and 1983, according to the survey information. According to the information presented as part of this bridge replacement project, the bridge was reconstructed in 1980.

The existing structure is a simple span concrete slab bridge which carries Old Forge Road over Marsh Run, Fiddlesburg, east of Hagerstown. The structure measures 32 feet long and '.5 feet wide. The bridge is not a particularly good example of its type and lacks the rchitectural integrity necessary to qualify it for listing on the National Register of Historic Places.

Documentation on the property/district is presented in: Review and Compliance Files

Prepared by: Washington County Engineering Department

Kimberly Prothro Williams — March 31, 1997
Reviewer, Office of Preservation Services — Date

NR program concurrence: X yes ___ no ___ not applicable

Peter E. Kintz — 4/1/97
Reviewer, NR program — Date

Survey No. WA-I-732

MARYLAND COMPREHENSIVE HISTORIC PRESERVATION PLAN DATA - HISTORIC CONTEXT

I. Geographic Region:

____	Eastern Shore	(all Eastern Shore counties, and Cecil)
____	Western Shore	(Anne Arundel, Calvert, Charles, Prince George's and St. Mary's)
____	Piedmont	(Baltimore City, Baltimore, Carroll, Frederick, Harford, Howard, Montgomery)
__X__	Western Maryland	(Allegany, Garrett and Washington)

II. Chronological/Developmental Periods:

____	Paleo-Indian	10000-7500 B.C.
____	Early Archaic	7500-6000 B.C.
____	Middle Archaic	6000-4000 B.C.
____	Late Archaic	4000-2000 B.C.
____	Early Woodland	2000-500 B.C.
____	Middle Woodland	500 B.C. - A.D. 900
____	Late Woodland/Archaic	A.D. 900-1600
____	Contact and Settlement	A.D. 1570-1750
____	Rural Agrarian Intensification	A.D. 1680-1815
____	Agricultural-Industrial Transition	A.D. 1815-1870
__X__	Industrial/Urban Dominance	A.D. 1870-1930
____	Modern Period	A.D. 1930-Present
____	Unknown Period (___ prehistoric	___ historic)

III. Prehistoric Period Themes:

____	Subsistence
____	Settlement
____	Political
____	Demographic
____	Religion
____	Technology
____	Environmental Adaptation

IV. Historic Period Themes:

____	Agriculture
____	Architecture, Landscape Architecture, and Community Planning
____	Economic (Commercial and Industrial)
____	Government/Law
____	Military
____	Religion
____	Social/Educational/Cultural
__X__	Transportation

V. Resource Type:

Category: Structure

Historic Environment: Rural

Historic Function(s) and Use(s): Bridge

Known Design Source:


10
TONS

#A1.30
A1.29

#A1.31
A1.30

#A1.32
A1.31

~~#A1.33~~
A1.32

~~#A1.34~~
A1.33